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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,708	07/14/2003	Robert J. Small	CHEM.004US2	7752

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EXAMINER

MARCHESCHI, MICHAEL A

ART UNIT PAPER NUMBER

1755

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/619,708

Applicant(s)

SMALL ET AL.

Examiner

Michael A Marcheschi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 98-196 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 98-196 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/20/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 98-117, 119, 120, 125-141 and 143-152 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. in view of Beital et al., Fang, and Yano et al.. **Although applicants might consider this a new rejection, the examiner previously defined that Mueller et al. teaches solid catalyst in column 7, (i.e. one being manganese (not in the groups excluded)). In view of this, the withdrawal of the references directed to Shadman et al. and Nishii et al. does *not* constitute a new rejection because the previous rejection stated that *all* catalyst are obvious (that meet this criteria) and Mueller et al. specifically teaches a catalyst (i.e. Mn) which is *not* excluded from the claimed groups. These other references were applied as an example of photoactive catalysts and are being withdrawn in view of applicants arguments. The mere exclusion of references which were used for exemplary purposes only does *not* constitute a new rejection when the primary reference implied the claimed broad catalyst sources (i.e. oxides of all solid catalyst meeting the criteria defined in column 7, lines 1-4, with Mn as being specifically defined).**

To prevent confusion, the examiner is redefining the previous rejection.

The primary reference teaches a composition which meets the above claims because column 5, lines 55-58 implies that the catalyst is coated on the abrasive. With respect to the catalyst, it is the examiners position that the solid catalyst of the reference includes and therefore makes obvious the claimed catalysts because it is the examiners position that these catalyst meet

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the criteria defined in column 7, lines 1-4. The reference implies that any catalyst meeting the criteria in column 7, lines 1-4 can be used. In addition, the reference specifically teaches a solid catalyst (i.e. manganese) which is not excluded from the claimed groups. With respect to the coating coverage, it is the examiner position that since the reference teaches that the abrasive can be coated with the catalyst, this implies the claimed coverage's. In view of this, it is therefore the examiners position that since the reference fails to mention any specific coating coverage (criticality), this (the absence of any such limitation) constitutes a broad teaching of coating coverage's and therefore it can be reasonably interpreted that the claimed coating coverage's are encompassed by the broad teachings according to this reference in the absence of any evidence showing the contrary (criticality). With respect to the uncoated particles, it is the examiners position that the reference also implies that the abrasive does not necessarily have a catalyst coating, thus reading on a mixture of catalyst coated abrasive particle in combination with uncoated abrasive particles. With respect to the use of other oxidizers (ozone, etc.), it is the examiners position that it would have been obvious to use any of the oxidizers, as shown by Beital et al. and Fang, as the oxidizers in the composition according to Mueller et al. because the substitution one known oxidizer for another that is to be used for the same purpose is well within the level of ordinary skill in the art. In addition, it is prima facie obvious to combine two or more materials disclosed by the prior art to form a third material that is to be used for the same purpose (i.e. a combination of oxidizers). In re Kerkhoven 205 USPQ 1069. It is also the examiners position that it would have been obvious to use any of the abrasive particles, as shown by Yano et al., as the abrasive particles in the composition according to Mueller et al. because the substitution one known abrasive particle for another that is to be used for the same purpose is

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well within the level of ordinary skill in the art. Finally, with respect to the characteristics of the abrasive (size, surface area and size distribution), the primary reference teaches sizes and surface areas which broadly encompass the claimed ranges. The sizes defined by the reference broadly suggest a distribution, thus making the claimed limitation obvious.

With respect to the method claims, the primary reference generally claims a substrate in a similar the polishing method and this generalization broadly encompasses all the claimed substrates because "A generic disclosure renders a claimed species *prima facie* obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)". With respect to the characteristics defined, it is the examiners position that these characteristics are expected with the use of the reference polishing slurry because said slurry is the same and the same slurry is expected to yield the same polishing characteristics on a substrate. Finally, it is the examiners position that the recycling limitation is obvious because this will be more economical and economics is a basis for obviousness.

Claims 98-196 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of copending Application No. 10/393,542. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the copending claims would render obvious the instant claims. The copending claims claim polishing compositions, methods of polishing and substrates, wherein the composition, methods and substrate can include all of the limitations of the instant claims.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 98-196 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over all the claims of copending Application No. 10/361,822. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the copending claims would render obvious the instant claims. The copending claims claim polishing compositions, methods of polishing and substrates, wherein the composition, methods and substrate can include all of the limitations of the instant claims. Although the claims of the copending application are not directed to a substrate, the instantly claimed subject matter is an obvious variation of said claims. The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter. Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Applicant's arguments filed 12/20/04 have been fully considered but they are not persuasive.

Applicants argue the ODP rejections and state that these rejections are moot in view of the cancellation of the claims (original). However, review of the copending claims still warrants the above rejections for the reasons defined above.

Applicants argue that Mueller et al. does not teach or suggest that the insoluble catalyst encompass a catalyst as recited in the pending claims. This argument is not persuasive because a clear review of the rejected claims state that the catalyst comprises a "source of an ion of a metal". The rejected claims do not set forth what the source is. Clearly Mn oxide can be a source of ions of a metal, the ions being Mn. Applicants have not presented any arguments that the claimed source excludes an oxide. In addition, the specification in section [0031] clearly implies that the source can be an oxide. In summary, the broad interpretation of "source or an ion or a metal" encompasses Mn oxide because Mn oxide can be a source of a metal ion (i.e. in its broad sense) absent evidence to the contrary. In addition, it is the examiners position that this teaching indirectly suggests metal oxide catalysts other than Mn oxide, as long as it meets the criteria defined by the reference. Such oxide catalyst also reading on a source. The claim can be given its broadest interpretation and since "source of an ion of a metal" is not specific as to the source, any source of any metal ion is within in the scope of this limitation.

Applicants also argue the interchangeability of the insoluble solids catalysts and the soluble catalysts of this reference. This argument is moot because the examiner was not relying on the interchangeability of the different catalysts according to this reference.

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With respect to the combination of the above reference with Shadman et al. and Nishii et al., these references have been withdrawn from the above rejection (not a new rejection-see above).

With respect to the combination of the above reference with Beital et al., Fang, and Yano et al., applicants fail to argue the combination as applied (i.e. obvious to use the known oxidizers and/or polishing particles).

Finally, applicants state that the examiners reliance of *In re Kerkhoven* 205 USPQ 1069 is not clear. To the contrary, it is extremely clear that this case law is applicable to the combination of oxidizers (rejection sets forth that it is prima facie obvious to combine two or more materials disclosed by the prior art to form a third material that is to be used for the same purpose (i.e. a combination of oxidizers)).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549; *In re Wertheim* 191 USPQ 90 (CCPA 1976)".

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548. Evidence of unexpected results must be commensurate in scope with the subject matter claimed. *In re Linder* 173 USPQ 356.

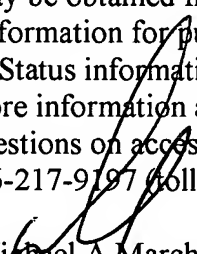
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mm
3/17/05


Michael A Marcheschi
Primary Examiner
Art Unit 1755